

<u>SUBJECT</u>		<u>DATE</u>
1056. Hazardous Waste Tanks and the Less than 90-Day Accumulation Time Limit	ENCORE	APR 23, 2015
1057. Decharacterized RCRA Waste - Manifesting and LDR Reporting	ENCORE	APR 30, 2015
1058. Decharacterized Hazardous Waste Listed Solely for Non-Toxic Characteristics	ENCORE	MAY 7, 2015
1059. Decharacterized Wastes, <90-Day Accumulation Time Limits and LDR Storage Prohibition	ENCORE	MAY 14, 2015
1060. Decharacterized Wastes and the LDR Dilution Prohibition	ENCORE	MAY 21, 2015
1061. Hazardous Debris Macroencapsulation and Size Reduction	ENCORE	MAY 28, 2015
1062. Universal Waste Lamps and Prohibition on Crushing		JUN 4, 2015
1063. F003 Listed Hazardous Waste and the 10% Rule	ENCORE	JUN 11, 2015
1064. F001 - F005 Listed Hazardous Waste and the 10% Rule	ENCORE	JUN 18, 2015
1065. Macroencapsulation of Hazardous Debris and Presence of Free Liquids	ENCORE	JUN 25, 2015
1066. DOT Shipping of Damaged, Defective or Recalled Lithium Batteries		JUL 1, 2015
1067. Used Oil Eligibility for Animal and Vegetable Oils	ENCORE	JUL 9, 2015
1068. Used Oil Eligibility for Petroleum Oils Mixed with Animal or Vegetable Oils		JUL 16, 2015
1069. Conditioned Exclusion for Listed Hazardous Waste Debris Treated via Extraction/Destruction	ENCORE	JUL 23, 2015
1070. Conditioned Exclusion for Characteristic Debris Treated via Immobilization		JUL 30, 2015
1071. RCRA Personnel Training and Classroom Training vs. Online Training		AUG 6, 2015
1072. PCB Decontamination Standards with No Decontamination Performed		AUG 13, 2015
1073. PCB Manifest Exceptions a.k.a. When is a PCB Manifest Not Required	ENCORE	AUG 19, 2015
1074. PCB Manifest Relief a.k.a. When is a PCB Manifest Not Required – The Sequel		AUG 27, 2015
1075. Hazardous Debris and Radioactively Contaminated Cadmium Batteries	ENCORE	SEP 3, 2015
1076. Hazardous Debris and Radioactively Contaminated Lead Acid Batteries	ENCORE	SEP 10, 2015
1077. Mercury Wet Cell Batteries - Debris or Not Debris	ENCORE	SEP 17, 2015
1078. Hazardous Debris and Non-Radioactive Lead Acid Batteries		SEP 24, 2015
1079. Unused Paraformaldehyde - U Listed Hazardous Waste or Not?	ENCORE	OCT 1, 2015
1080. CAS Numbers and the Hazardous Waste "U" and "P" Listings	ENCORE	OCT 8, 2015
1081. Universal Waste One Year Accumulation and Multiple Handlers	ENCORE	OCT 15, 2015
1082. LDR Notifications and F001-F005 Constituents of Concern	ENCORE	OCT 29, 2015
1083. LDR Notifications and F001-F005 Constituents of Concern – Again	ENCORE	NOV 5, 2015
1084. LDR Notifications and F001-F005 Constituents of Concern - One Last Time	ENCORE	NOV 12, 2015
1085. DOT and Terminal Protection of Alkaline Batteries	ENCORE	NOV 19, 2015
1086. Used Oil and Keeping Containers Closed – WAC 173-303 vs. 40 CFR 279		NOV 24, 2015
1087. PCB Weight Determinations	ENCORE	DEC 3, 2015
1088. Satellite Accumulation Requirements and Container Inspections	ENCORE	DEC 10, 2015
1089. 'Twas The Night Before Christmas - The Twenty-Third Annual Edition	ENCORE	DEC 24, 2015
1090. Satellite Accumulation and 85-Gallon Containers	ENCORE	DEC 31, 2015
1091. PCB Date Removed From Service Notations – On the Item or In a Log	ENCORE	JAN 7, 2016
1092. The Date Removed From Service Marking on the PCB Mark	ENCORE	JAN 14, 2016
1093. Generator Weekly Inspection Log Documentation – Federal vs. WA State	ENCORE	JAN 21, 2016
1094. Used Oil and Weekly Inspections	ENCORE	JAN 28, 2016
1095. TSCA/PCB Determinations for Fluorescent Light Ballasts via the Manufacture Date	ENCORE	FEB 4, 2016
1096. PCB Containers and Multiple Removed From Service Dates	ENCORE	FEB 11, 2016
1097. Generator Inspection Logs and Corrective Action Documentation	ENCORE	FEB 18, 2016
1098. PCB Concentrations and Micrograms per Centimeters Squared (µg/cm²)		FEB 25, 2016
1099. RCRA Empty Containers and Removing as Much Waste as Possible	ENCORE	MAR 3, 2016
1100. PCB Incineration and "Six Nines" Destruction Removal Efficiency Criteria	ENCORE	MAR 10, 2016
1101. RCRA Treatment and The Two-Part Definition		MAR 17, 2016
1102. D002 Waste and Dilution as Adequate LDR Treatment	ENCORE	MAR 24, 2016
1103. Satellite Accumulation of Aerosol Cans and Determining the 55-Gallon Limit		MAR 31, 2016

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## TWO MINUTE TRAINING

**TO:** CH2M HILL PLATEAU REMEDIATION COMPANY

**FROM:** PAUL W. MARTIN, RCRA Subject Matter Expert  
CHPRC Environmental Protection, Hanford, WA

**SUBJECT:** SATELLITE ACCUMULATION OF AEROSOL CANS AND DETERMINING THE 55-GALLON LIMIT

**DATE:** MARCH 31, 2016

<u>CHPRC Projects</u>	<u>CH PRC - Env. Protection</u>	<u>MSA</u>	<u>Hanford Laboratories</u>	<u>Other Hanford Contractors</u>	<u>Other Hanford Contractors</u>
Richard Austin Roni Ashley Tania Bates Bob Cathel Rene Catlow Richard Clinton Larry Cole John Dent Brian Dixon Eric Erpenbeck Stuart Hildreth Mike Jennings Stephanie Johansen Jeanne Kisielnicki Melvin Lakes Marty Martin Jim McGrogan Stuart Mortensen Anthony Nagel Dean Nester Dave Richards Phil Sheely Connie Simiele Jennie Stults Michael Waters Jeff Widney	Brett Barnes Mitch Boyd Ron Brunce Bill Cox Laura Cusack Lorna Dittmer Rick Engelmann Ted Hopkins Sasa Kosjerina Jim Leary Dale McKenney Jon McKibben Rick Oldham Linda Petersen Fred Ruck Ray Swenson Wayne Toebe Lee Tuott Daniel Turlington Dave Watson Joel Williams	Jerry Cammann Jeff Ehliis Garin Erickson Lori Fritz Panfilo Gonzales Jr. Dashia Huff Mark Kamberg Edwin Lamm Candice Marple Saul Martinez Jon Perry Thomas Pysto Christina Robison Don Rokkan Lana Strickling Lou Upton	(TBD)  <u>DOE RL, ORP, WIPP</u>  Mary Beth Burandt Duane Carter Cliff Clark Mike Collins Tony McKarns Ellen Mattlin Greg Sinton Scott Stubblebine	Bill Bachmann Dean Baker Scott Baker Lucinda Borneman Paul Crane Tina Crane Greta Davis Jeff DeLine Ron Del Mar John Dorian Mark Ellefson Darrin Faulk Joe Fritts Tom Gilmore Rob Gregory Gene Grohs James Hamilton Andy Hobbs Ryan Johnson Dan Kimball Megan Lerchen Richard Lipinski Charles (Mike) Lowery Michael Madison Terri Mars Cary Martin Grant McCalmant Steve Metzger Tony Miskho Matt Mills Tom Moon Chuck Mulkey Mandy Pascual Kirk Peterson Jean Quigley	Dan Saueressig Merrie Schilperoort Joelle Moss Glen Triner Greg Varljen Julie Waddoups Jay Warwick Kyle Webster Jeff Westcott Ted Wooley

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## TWO MINUTE TRAINING

**SUBJECT:** Satellite Accumulation of Aerosol Cans and Determining the 55-Gallon Limit

**Q:** A customer has started accumulating empty and non-working, partially full aerosol paint containers in a large 100-gallon tote that is being managed as a RCRA satellite accumulation area (SAA). As the aerosol cans accumulate, the customer is not sure how to determine when the 55-gallon limit is being approached. For these aerosol cans, should the SAA 55-gallon limit be determined based upon the accumulation of 55 gallons of aerosol cans (roughly a half-full 100-gallon tote), or based upon the accumulation of 55 gallons of the residues within the aerosol cans?

**A:** According to [WAC 173-303-200\(2\)\(a\)](#) [[40 CFR 262.34\(c\)](#)], a generator may accumulate as much as 55 gallons of dangerous/hazardous waste or one quart of acutely hazardous waste in containers at or near any point of generation where waste initially accumulates. The regulation does not give any details on how the 55-gallon or 1 quart limit is determined.

However, an EPA guidance letter dated February 17, 2016, ([RO 14875](#)) concerning satellite accumulation of containers with acutely hazardous waste residues stated:

*“... the residues remaining in containers that held commercial chemical products are hazardous wastes, and EPA has clarified on several occasions that a distinction may be drawn between the residues themselves and the container...”*

*Accordingly, the same principle would apply here, and the one-quart accumulation limitation in an SAA only applies to acute hazardous waste and any residues within the container. In your circumstances, the container itself does not need to be included when calculating the maximum accumulation volume of acute hazardous waste in an SAA.”*

Applying this acutely hazardous waste residue analogy to non-acutely hazardous waste aerosol cans with residues means the customer can calculate the residues remaining in the empty and partially full aerosol cans to determine when the 55-gallon limit is being approached. The customer could take a conservative approach and accumulate the aerosol cans in a 55-gallon container and when full of cans, assume the 55-gallon limit has been reached even though there may only be a few gallons of actual hazardous waste residues. On the other hand, the customer could make defensible estimates or assumptions of how much residue remains in the aerosol cans as they are accumulated. With this option, the customer might be able to fill the 100-gallon tote to capacity and still not exceed the 55-gallon limit.

Therefore the 55-gallon limit for these aerosol cans can be based on the volume of residues remaining in the aerosol cans as opposed to the aerosol cans themselves.

### SUMMARY:

- SAs are limited to 55 gallons of hazardous/dangerous wastes or 1 quart of acutely hazardous waste.
- The SAA limit could conservatively be based on the volume of the aerosol container themselves.
- The SAA limit could also be based only on the volume of the residues remaining within the aerosol cans.

WAC 173-303-200(2) and the February 17, 2016, EPA guidance letter are attached to the e-mail. If you have any questions, please contact me at "Paul\_W\_Martin@rl.gov" or at (509) 376-6620.

**FROM:** Paul W. Martin

**DATE:** 3/31/16

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## TWO MINUTE TRAINING - ATTACHMENT

**SUBJECT:** Satellite Accumulation of Aerosol Cans and Determining the 55-Gallon Limit

### WAC 173-303-200 Accumulating dangerous waste on-site.

(2) Satellite accumulation.

(a) A generator may accumulate as much as fifty-five gallons of dangerous waste or one quart of acutely hazardous waste (as defined in [WAC 173-303-040](#)) in containers at or near any point of generation where waste initially accumulates (defined as a satellite accumulation area in WAC 173-303-040). The satellite area must be under the control of the operator of the process generating the waste or secured at all times to prevent improper additions of wastes to a satellite container. Satellite accumulation is allowed without a permit provided the generator:

(i) Complies with [WAC 173-303-630](#)(2), (4), (5)(a) and (b), (8)(a), and (9)(a) and (b); and

(ii) Complies with subsection *[WAC 173-303-200](1)(d)* of this section.

(b) When fifty-five gallons of dangerous waste or one quart of acutely hazardous waste (as defined in WAC 173-303-040) is accumulated, the container(s) must be marked immediately with the accumulation date and moved within three days to a designated storage or accumulation area.

(c) On a case-by-case basis the department may require the satellite area to be managed in accordance with all or some of the requirements under subsection (1) of this section, if the nature of the wastes being accumulated, a history of spills or releases from accumulated containers, or other factors are determined by the department to be a threat or potential threat to human health or the environment.

**FROM:** Paul W. Martin

**DATE:** 3/31/16

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## TWO MINUTE TRAINING - ATTACHMENT

**SUBJECT:** Satellite Accumulation of Aerosol Cans and Determining the 55-Gallon Limit

FEB 17 2016

OFFICE OF  
SOLID WASTE AND  
EMERGENCY RESPONSE

Charlotte A. Smith  
PharmEcology Services  
WM Healthcare Solutions, Inc.  
N96W 13600 County Line Road  
German Town, Wisconsin 53022

Dear Ms. Smith:

Thank you for your letter from May 12, 2014, requesting EPA's determination regarding the one quart limit for P-listed waste in satellite accumulation areas (SAA). Specifically, your request is regarding the accumulation of fully dispensed containers (e.g., warfarin blister packs, stock bottles, etc.) that are not "RCRA empty" (in accordance with [40 CFR 261.7](#)) and how the volume of these containers are counted toward the one-quart limit for acute hazardous wastes in an SAA.

Your letter quoted EPA Region I's interpretation that stated, "The one-quart accumulation limit of acutely hazardous waste in a satellite area applies to the hazardous waste residues accumulated and not the container" (attached). EPA HQ agrees with this statement and, to supplement, we issued a memorandum on November 4<sup>th</sup> 2011 regarding containers that once held P-listed pharmaceuticals ([RCRA Online #14827](#)). Below is a brief discussion in relation to your issue but please refer to the cited supporting documents in this letter for a more detailed explanation. EPA's regulatory language in [40 CFR 261.33\(c\)](#) states the residues remaining in containers that held commercial chemical products are hazardous wastes, and EPA has clarified on several occasions that a distinction may be drawn between the residues themselves and the container. See, for example, preamble discussion in the November 25, 1980 federal register ([45 FR 78527](#)). Most relevant to your question is where the EPA has clarified that a hazardous waste residue may be considered separately from its container for purposes of determining the weight of hazardous waste and thus which generator rules apply. See guidance memoranda [RCRA Online #12151](#), [RCRA Online #11803](#), and [RCRA Online #14827](#) regarding determining the appropriate generator category. Accordingly, the same principle would apply here, and the one-quart accumulation limitation in an SAA only applies to acute hazardous waste and any residues within the container. In your circumstances, the container itself does not need to be included when calculating the maximum accumulation volume of acute hazardous waste in an SAA.

Please note that this letter only discusses the federal RCRA hazardous waste regulations for P-listed wastes accumulating in an SAA. Under section 3006 of RCRA, individual states can be authorized to administer and enforce their own hazardous waste programs in lieu of the federal program. States that are authorized to implement the RCRA program have authority to promulgate regulations that are more stringent than the federal program. You should consult with the appropriate authorized state agency for any site-specific guidance. If you have any questions about the federal hazardous waste regulations discussed in this letter, please contact Josh Smeraldi at (703) 308-0441, [Smeraldi.Josh@epa.gov](mailto:Smeraldi.Josh@epa.gov) or Kristin Fitzgerald at (703) 308-8286, [Fitzgerald.Kristin@epa.gov](mailto:Fitzgerald.Kristin@epa.gov).

Sincerely,

Barnes Johnson, Director  
Office of Resource Conservation and Recovery

**FROM:** Paul W. Martin

**DATE:** 3/31/16

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